

/	解説	多項式の計算NO3	NAME	7
	NO3		乗法公式2,3-②	

Aコース

Bコース

Cコース

Dコース

⑦ $(3x-1)^2$

$$= (3x)^2 + 3x \times -1 \times 2 + (-1)^2$$

$$= 9x^2 - 6x + 1$$

⑦ $(2x-4)^2$

$$= (2x)^2 + 2x \times -4 \times 2 + (-4)^2$$

$$= 4x^2 - 16x + 16$$

⑦ $(2a-9)^2$

$$= (2a)^2 + 2a \times -9 \times 2 + (-9)^2$$

$$= 4a^2 - 36a + 81$$

⑦ $(4a-5)^2$

$$= (4a)^2 + 4a \times -5 \times 2 + (-5)^2$$

$$= 16a^2 - 40a + 25$$

⑧ $(2x-3y)^2$

$$= (2x)^2 + 2x \times -3y \times 2 + (-3y)^2$$

$$= 4x^2 - 12xy + 9y^2$$

⑧ $(5a-2b)^2$

$$= (5a)^2 + 5a \times -2b \times 2 + (-2b)^2$$

$$= 25a^2 - 20ab + 4b^2$$

⑧ $(7p-3q)^2$

$$= (7p)^2 + 7p \times -3q \times 2 + (-3q)^2$$

$$= 49p^2 - 42pq + 9q^2$$

⑧ $(xy-z)^2$

$$= (xy)^2 + xy \times -z \times 2 + (-z)^2$$

$$= x^2y^2 - 2xyz + z^2$$

⑨ $(a+0.2)^2$

$$= a^2 + a \times 0.2 \times 2 + 0.2^2$$

$$= a^2 + 0.4a + 0.04$$

⑨ $(x-0.3)^2$

$$= x^2 + x \times -0.3 \times 2 + (-0.3)^2$$

$$= x^2 - 0.6x + 0.09$$

⑨ $(2m-0.1)^2$

$$= (2m)^2 + 2m \times -0.1 \times 2 + (-0.1)^2$$

$$= 4m^2 - 0.4m + 0.01$$

⑨ $(-p+4q)^2$

$$= (-p)^2 - p \times 4q \times 2 + (4q)^2$$

$$= p^2 - 8pq + 16q^2$$

⑩ $(x-\frac{1}{4})^2$

$$= x^2 + x \times -\frac{1}{4} \times 2 + (-\frac{1}{4})^2$$

$$= x^2 - \frac{1}{2}x + \frac{1}{16}$$

⑩ $(y+\frac{1}{2})^2$

$$= y^2 + y \times \frac{1}{2} \times 2 + (\frac{1}{2})^2$$

$$= y^2 + y + \frac{1}{4}$$

⑩ $(3a+\frac{1}{5}b)^2$

$$= (3a)^2 + 3a \times \frac{1}{5}b \times 2 + (\frac{1}{5}b)^2$$

$$= 9a^2 + \frac{6}{5}ab + \frac{1}{25}b^2$$

⑩ $(\frac{a}{3}-\frac{b}{2})^2$

$$= (\frac{a}{3})^2 + \frac{a}{3} \times -\frac{b}{2} \times 2 + (-\frac{b}{2})^2$$

$$= \frac{a^2}{9} - \frac{ab}{3} + \frac{b^2}{4}$$

⑪ $(xy-50z)^2$

$$= (xy)^2 + xy \times -50z \times 2 + (-50z)^2$$

$$= x^2y^2 - 100xyz + 2500z^2$$

⑪ $(-2x-3y)^2$

$$= (-2x)^2 - 2x \times -3y \times 2 + (-3y)^2$$

$$= 4x^2 + 12xy + 9y^2$$

⑪ $(ab+cd)^2$

$$= (ab)^2 + ab \times cd \times 2 + c^2d^2$$

$$= a^2b^2 + 2abcd + c^2d^2$$

⑪ $(0.4a-0.3b)^2$

$$= (0.4a)^2 + 0.4a \times -0.3b \times 2 + (-0.3b)^2$$

$$= 0.16a^2 - 0.24ab + 0.09b^2$$

⑫ $(4a-\frac{5}{6})^2$

$$= (4a)^2 + 4a \times -\frac{5}{6} \times 2 + (-\frac{5}{6})^2$$

$$= 16a^2 - \frac{20}{3}a + \frac{25}{36}$$

⑫ $(\frac{3}{8}a+2b)^2$

$$= (\frac{3}{8}a)^2 + \frac{3}{8}a \times 2b \times 2 + (2b)^2$$

$$= \frac{9}{64}a^2 + \frac{3}{2}ab + 4b^2$$

⑫ $(xy+\frac{7}{10})^2$

$$= (xy)^2 + xy \times \frac{7}{10} \times 2 + (\frac{7}{10})^2$$

$$= x^2y^2 + \frac{7}{5}xy + \frac{49}{100}$$

⑫ $(\frac{5}{6}x-\frac{3}{5}y)^2$

$$= (\frac{5}{6}x)^2 + \frac{5}{6}x \times -\frac{3}{5}y \times 2 + (-\frac{3}{5}y)^2$$

$$= \frac{25}{36}x^2 - xy + \frac{9}{25}y^2$$